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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,231	08/02/2005	Toshiyuki Fujine	1248-0799PUS1	9924
2292 7590 12/04/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER HO, HOAI QUAN T	
			ART UNIT 2629	PAPER NUMBER
			NOTIFICATION DATE 12/04/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

**Application No.**

10/544,231

**Applicant(s)**

FUJINE, TOSHIYUKI

**Examiner**

Hoai-Quan T. Ho

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Priority*

1. This office acknowledges receipt of the following item from the Applicant:

Information Disclosure Statement (IDS) was considered.

Papers submitted under 35 U.S.C. 119(a)-(d) have been placed of record in the file.

2. Claims 1-5 are presented for examination.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawabe et al USP 7161576.

As per claim 1, Kawabe disclosed a liquid crystal display displaying, using a liquid crystal display panel, an image responsive to input image data, comprising: driving means for driving the liquid crystal display panel in either an impulse drive mode (**moving picture mode**) or a hold drive mode (**still image mode**) (Col 17, lines 60-67), (i) in the impulse drive mode an image display period (**Fig 4, element 402**) for performing display according to the input image data, and a monochrome display period (**Fig 4, element 403**) for performing display according to previously-specified certain monochrome display data ("**black level**"; Col 9, lines 63-64) being

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generated within an input image data rewriting period for writing in each pixel of the liquid crystal display panel (**Col 9, lines 18-64**), while (ii) in the hold drive mode display according to the input image data being always performed within the rewriting period without setting the monochrome display period (**Col 17, lines 60-67**); switching means (**Col 18, lines 4-6**) for switching between the modes for driving the liquid crystal display panel by the driving means (**Col 10, lines 55-65**); and means for varying, in accordance with the input image data and according to one of the modes for driving the liquid crystal display panel, a gradation voltage to be applied to the liquid crystal display panel (**Col 10, lines 43-53**), so as to prevent changes in gamma characteristics caused by differences in response speed of liquid crystal between display gradations (**Col 10, lines 49-55**), on account of insertion of the monochrome display data, by varying, in accordance with the input image data and according to one of the modes for driving the liquid crystal display panel, a gradation voltage to be applied to the liquid crystal display panel (**Col 10, lines 4-28; lines 43-65**).

As per claim 2, Kawabe discloses the liquid crystal display of claim 1, wherein the means for varying the gradation voltage varies a reference gradation voltage for driving the liquid crystal display panel (**Col 11, lines 1-26**).

As per claim 3, Kawabe discloses the liquid crystal display of claim 2, further comprising: a storage section storing sets of reference gradation voltage data previously specified (**Col 11, lines 1-26**).

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As per claim 5, Kawabe discloses the liquid crystal display of any one of claims 1 through 3, wherein the switching means switches between the modes for driving the liquid crystal display panel in accordance with a user's instruction (**Col 18, lines 4-7**).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabe as applied to claims 1-3, and 5 above, and further in view of Iisaka USP 7084861.

As per claim 4, Kawabe does not teach the below mentioning, however Iisaka discloses the means for detecting a temperature in the liquid crystal display; and means for varying a gradation voltage to be applied to the liquid crystal display panel, in accordance with the input image data and the detected temperature in the display (**Col 9, lines 24-50**). Kawabe's and Iisaka's teaching are combinable because they are from same field or endeavor in liquid crystal display technologies. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Kawabe's device to include the components of Iisaka's that Kawabe did not detailed. The suggestion/motivation for doing so would have been to improve the picture quality (**Iisaka; Col 9, lines 3-50**). Therefore, it would have been obvious to combine Kawabe's and Iisaka's teaching to obtain the invention as specified in claim 4.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoai-Quan T. Ho whose telephone number is 571-270-3148. The examiner can normally be reached on 7:30 A.M. - 4:30 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eisen Alexander can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**H-Q. Ho**

November 26, 2007

  
ALEXANDER EISEN  
SUPERVISORY PATENT EXAMINER